### **REMARKS**

In the Office Action, the Examiner noted that Claims 2-43, 46-48 and 52-66 are pending. Claims 37-41 and 46-48 and 52 are independent, and claims 2-36, 42-43, and 53-66 are dependent. Claims 2-36 and 53-66 (directly or indirectly) depend from claim 40, and claims 42-43 depend from claim 41. The Examiner also noted that Claims 37, 38 and 48 are allowed, and claims 2-21, 24, 28, 29 and 34 are objected. In addition, the Examiner indicated that Claims 23, 25-27, 30-33, 35, 36, 39-43, 46, 47 and 52-66 are rejected.

By this Amendment, Claims 39-41, 46, 47 and 52 have been amended. Thus, Claims 2-43, 46-48 and 52-66 are pending in the application. No new matter is added. Favorable reconsideration and allowance of the claims are requested.

This Amendment conforms to new rule 37 C.F.R. Section 41.33(a) which permits an Examiner to enter an Amendment filed after final action, but prior to the date of filing an appeal brief, that places the application in a condition for allowance. As discussed with Examiner Gilligan and in view of the Advisory Action indicating that all claims were allowed, with the exception of claim 47, this Amendment After Final places the application in a condition for allowance.

## Rejection Under 35 U.S.C. Section 112

Claims 23, 25-27, 30-33, 35-36, 40-43 and 53-66 stand rejected under 35 U.S.C. Section 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has amended independent claims 40 and 41 to correct the informality. Therefore, the remaining rejected dependent claims that depend from claims 40 and 41, namely Claims 23, 25-27, 30-33, 35-36, 42-43 and 53-66 are also submitted to satisfy the requirements under Section 112, Second Paragraph. Applicant respectfully requests withdrawal of this rejection. As a result, claims 2-38, 40, 48 and 53-66 should be in allowable condition.

### Rejection Under 35 U.S.C. Section 102 and 103

Claims 39, 41-43 and 46 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,006,987 to Harless (Harless).

Claims 47 and 52 are rejected under 35 U.S.C. §103(a) as being obvious over Harless in view of U.S. Patent No. 6,108,635 to Herren et al. (Herren).

Applicants note that the reference to Herren can be antedated with a 37 CFR 1.131 affidavit.

Accordingly, any amendments presented herein should not be construed as narrowing amendments with respect to any of these references.

#### The Claimed Invention

One embodiment of the claimed invention is directed to a computer simulation and evaluation system for simulating, for example, "interventions, to a patient having a health state, by a user, and for evaluating the interventions." The system comprises a knowledge database that has a plurality of patient health characteristics. After the user provides an input to the system, the system evaluates the user responsive to the user's input.

This and other embodiments of the present invention can be used repeatedly, with numerous users, to evaluate users' medical knowledge. As discussed on page pages 23 and 24 of the specification, known patient-user medical simulations are "hard-wired" into the system, thereby

rendering them unsuitable for widespread use in testing as they typically provide a single or very limited number of patient scenarios.

### **U.S. Patent No. 5,006,987 to Harless**

With regard to Harless, column 4, lines 17-30 indicate that the interactive medical drama concerns a single patient (Frank Hall), with a single medical condition ("weakness and abdominal pain following an episode of vomiting blood two days earlier"). As column 3, lines 27-31, and claims 1, 6, 7, 19 and 24 indicate, the drama is "prerecorded." Consequently, and in contrast to the claimed invention, Harless does not consider, for example, the medical knowledge of the user. With Harless, it does not matter what the profile, or medical knowledge, of the user is, particularly since all users will encounter the same patient with the same medical condition. Nor is the patient's medical history, for example, dynamically generated, based upon a user's profile.

#### U.S. Patent No. 6,108,978 to Herren et al.

Herren is directed to a system and computer assisted methodology that supports development of new medical interventions for diseases (see, e.g., Abstract, claim 1). Without conceding that Herren discloses any of the limitations of the present invention, Herren is not concerned with testing a user's medical problem-solving skills. Accordingly, like Fink, Herren does not, for example, generate a patient and patient history for such a purpose. Nor does Herren consider, for example, the user's area(s) that requires evaluation for any purpose, let alone for purposes of generating a patent history (which Herron does not do).

Without conceding that Harless and/or Herren et al. discloses any of the limitations in the rejected claims, Harless and/or Herren et al. does not teach or suggest, let alone disclose, a dynamically generated patient history that comprises "a patient age, gender, and age of onset of

medical condition," as recited in the claimed invention. Moreover, the medical condition of the patient in Harless and/or Herren et al. is not "one of a plurality of potential medical conditions," let alone one of a plurality of medical conditions that have been "dynamically" generated, each as recited in the claimed invention. Instead, and as has been noted, Harless and/or Herren et al. merely presents to all users, in a prerecorded, static manner, a single patient with a single medical condition.

With regard to the "dynamically generating" step, on page 14 of the Office Action the Examiner agrees that Harless does not explicitly teach that generating a patient medical history comprises "iterating from said first target health state backward in time through at least one precursor health state to an initial health state." The Examiner takes the position, however, that "Herren teaches generating a medical history for a simulated patient by iterating from a first target health state backward in time through at least one precursor health state to an initial health state (column 7, lines 42-46)." However, as discussed during the November 18, 2003 interview and as agreed by the Examiner, column 7, lines 42-46 do not disclose these features of the claimed invention. In particular, this passage expressly states that "a Patient History module receives user inputs of the specific patient attributes." (emphasis added). The fact that the Patient History merely receives information is further supported by, for example, Figure 27, column 41, lines 30-55, and claim 25. Accordingly, insofar as the Patient History module disclosed in Herren passively receives information, Herrin cannot in any way be considered to teach or suggest, for example, Applicants' claimed limitation of "dynamically generating a medical history for a patient, wherein generating said medical history comprises iterating from a current medical condition backward in time through at least one precursor health state to a normal health state." (emphasis added). Finally, Applicants have previously discussed how

Harless does not teach or suggest that "the medical condition is one of a plurality of potential

medical conditions," as well as other features of the present invention which are absent from

Harless.

With regard to the Examiner's statement with respect to prior art made of record, but not

relied upon, Applicant disagrees that the Kurzweil and Piemme references are in fact prior to

Applicant's invention and filing date. Accordingly, Applicant does not acquiesce with regarding

to the Examiner's statement in this regard.

Accordingly, Applicants respectfully submit that the combination of limitations recited in

claims 39, 41-43, 46, 47 and 52 are patentable over the prior art, when interpreted as a whole.

**CONCLUSION** 

Applicant respectfully submits that, as described above, the cited prior art does not show

or suggest the combination of features recited in the claims. Applicant does not concede that the

cited prior art shows any of the elements recited in the claims. However, Applicant has provided

specific examples of elements in the claims that are clearly not present in the cited prior art.

Applicant strongly emphasizes that one reviewing the prosecution history should not

interpret any of the examples Applicant has described herein in connection with distinguishing

over the prior art as limiting to those specific features in isolation. Rather, Applicant asserts that

it is the combination of elements recited in each of the claims, when each claim is interpreted as

a whole, which is patentable. Applicant has emphasized certain features in the claims as clearly

not present in the cited references, as discussed above. However, Applicant does not concede

that other features in the claims are found in the prior art. Rather, for the sake of simplicity,

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Applicant is providing examples of why the claims described above are distinguishable over the

cited prior art.

Applicant wishes to clarify for the record, if necessary, that the claims have been

amended to expedite prosecution. Moreover, Applicant reserves the right to pursue the original

subject matter recited in the present claims in a continuation application.

Any narrowing amendments made to the claims in the present Amendment are not to be

construed as a surrender of any subject matter between the original claims and the present

claims; rather merely Applicant's best attempt at providing one or more definitions of what the

Applicant believes to be suitable patent protection. In addition, the present claims provide the

intended scope of protection that Applicant is seeking for this application. Therefore, no

estoppel should be presumed, and Applicant's claims are intended to include a scope of

protection under the Doctrine of Equivalents.

Further, Applicant hereby retracts any arguments and/or statements made during

prosecution that were rejected by the Examiner during prosecution and/or that were unnecessary

to obtain allowance, and only maintains the arguments that persuaded the Examiner with respect

to the allowability of the patent claims, as one of ordinary skill would understand from a review

of the prosecution history. That is, Applicant specifically retracts statements that one of ordinary

skill would recognize from reading the file history were not necessary, not used and/or were

rejected by the Examiner in allowing the patent application.

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For all the reasons advanced above, Applicant respectfully submits that the rejections have been overcome and should be withdrawn.

For all the reasons advanced above, Applicant respectfully submits that the Application is in condition for allowance, and that such action is earnestly solicited.

Appl.No.09/759,205

Amdt. dated October 5, 2004

Reply to Office action of March 15, 2004

# **AUTHORIZATION**

The Commissioner is hereby authorized to charge any additional fees, which may be required for this Amendment, or credit any overpayment to Deposit Account No. 08-0219

In the event that an Extension of Time is required, or which may be required in addition to that requested in a petition for an Extension of Time, the Commissioner is requested to grant a petition for that Extension of Time which is required to make this response timely and is hereby authorized to charge any fee for such an Extension of Time or credit any overpayment for an Extension of Time to Deposit Account No. 08-0219.

Respectfully submitted,

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